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**REMARKS**

Claims 1-12 are all the claims pending in the application.

**I. Objection to the Claims**

Claim 12 has been objected to because the preamble of claim 12 is not consistent with the preamble of claim 11, from which claim 12 depends. Applicant thanks the Examiner for pointing out this typographical error, and notes that claim 12 has been amended herein such that the preamble is now consistent with the preamble of claim 11. Accordingly, Applicant kindly requests that the above-noted objection be reconsidered and withdrawn.

**II. Claim Rejections under 35 U.S.C. § 101**

Claims 10-12 have been rejected under 35 U.S.C. § 101, as being directed to non-statutory subject matter. In particular, the Examiner has indicated that claims 10-12 are drawn to software per se.

By this amendment, Applicant notes that claims 10-12 have been amended such that these claims are now drawn to a computer program that is stored on a computer-readable medium. Accordingly, Applicant kindly requests that the above-noted rejection be reconsidered and withdrawn.

**III. Claim Rejections under 35 U.S.C. § 102**

Claims 1-3 and 6 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Ellis et al. (U.S. 6,029,226).

By this amendment, Applicant notes that claim 1 has been amended so as to include

features that were recited in original claims 2 and 3.

In particular, Applicant notes that claim 1 now recites the features of a writing unit operable to perform the data writing to the memory card by the consecutive commands in a single process, wherein the process is activated when an analysis unit decodes a write-start address *A* and a sector number *s* from the one command, and involves the data writing being started from the write-start address *A*, and wherein the analysis unit analyzes the following command until the written sector number reaches *s*. Applicant respectfully submits that Ellis does not disclose or suggest such a combination of features.

With respect to Ellis, Applicant notes that this reference discloses a method for writing data to a storage device in which two write commands can be processed as a single command (see col. 3, lines 21-24 and col. 6, lines 25-26). In Ellis, a merger of two such write commands to a single write command is referred to as a “coalesced” write (see col. 6, lines 22-25).

In this regard, it is explained in Ellis that upon receiving a first write request to write a first set of data to a storage device, the first set of data is transferred to memory for temporary storage prior to transfer to the storage device (see col. 3, lines 25-27). Thereafter, upon receiving a second write request to write a second set of data to the storage device, a comparison is made between the ending logical block address (LBA) of the first set of data that is stored in the memory and the logical block address of the second set of data (see col. 3, lines 31-33; and col. 6, lines 17-22).

As disclosed in Ellis, the above-noted comparison between logical block addresses is made in order to determine whether the second set of data can be written to the storage device along with the first set of data as a single write operation (see col. 3, lines 31-37). In particular,

as explained in Ellis, if the logical block address of the second write request is within a certain range of the ending logical block address of the first set of data that is stored in the memory, then the second set of data is written to the memory as part of the first write request (see col. 3, lines 37-41; col. 6, lines 17-22 and col. 7, lines 24-27).

Based on the foregoing description, Applicant notes that, in Ellis, the first and second sets data that are to be written to the storage device in a single write command (i.e., a “coalesced” write) are temporarily stored in memory prior to being written to the storage device.

As noted above, claim 1 recites the feature of a writing unit that is operable to perform the data writing to the memory card by the consecutive commands in a single process, wherein the process is activated when an analysis unit decodes a write-start address A and a sector number s from the one command, and involves the data writing being started from the write-start address A, wherein the analysis unit analyzes the following command until the written sector number reaches s.

In other words, according to claim 1, for a first command (i.e., “one command”), data writing to the memory card is started from the write-start address A, and a second command (i.e., “following command”) is analyzed during the writing of the first command until the written sector number of the first command reaches a sector number *s*.

In this regard, as noted above, in Ellis, the first and second sets data that are to be written to the storage device in a single write command (i.e., a “coalesced” write) are temporarily stored in memory prior to being written to the storage device. Thus, in Ellis, because the first and second sets of data are temporarily stored prior to being written to the storage device as a single write operation, it is clear that Ellis does not disclose the ability to analyze the second set of data

during the writing of the first set of data to the storage device.

As such, Applicant respectfully submits that Ellis does not disclose, suggest or otherwise render obvious the above-noted features recited in amended claim 1 of a writing unit that is operable to perform the data writing to the memory card by the consecutive commands in a single process, wherein the process is activated when an analysis unit decodes a write-start address *A* and a sector number *s* from the one command, and involves the data writing being started from the write-start address *A*, and wherein the analysis unit analyzes the following command until the written sector number reaches *s*.

In view of the foregoing, Applicant respectfully submits that amended claim 1 is patentable over Ellis, an indication of which is kindly requested.

Moreover, Applicant notes that by providing the above-noted features recited in claim 1 in which the drive device analyzes a second command during the writing of a first command, even when a host device issues a large number of commands each requesting a short length of data, the drive device is capable of processing the commands without causing a drop in the transfer rate because the time period for analyzing the commands will not negatively affect the transfer rate.

Regarding claims 2, 3 and 6, Applicant notes that these claims depend from claim 1 and are therefore considered patentable at least by virtue of their dependency.

### **III. Claim Rejections under 35 U.S.C. § 103(a)**

A. Claims 4 and 5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (U.S. 6,029,226) in view of Ellis et al. (U.S. 7,181,548).

Claims 4 and 5 depend from claim 1. Applicant submits that Ellis ('548) fails to cure the deficiencies of Ellis ('226), as discussed above, with respect to claim 1. Accordingly, Applicant submits that claims 4 and 5 are patentable at least by virtue of their dependency.

B. Claims 7 and 8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (U.S. 6,029,226) in view of Krantz (U.S. 6,826,650).

Claims 7 and 8 depend from claim 1. Applicant submits that Krantz fails to cure the deficiencies of Ellis, as discussed above, with respect to claim 1. Accordingly, Applicant submits that claims 7 and 8 are patentable at least by virtue of their dependency.

C. Claims 10-12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (U.S. 6,029,226) in view of Carman et al. (U.S. 6,272,632).

Regarding claim 10, Applicant notes that this claim has been amended in a similar manner as claim 1 so as to recite the features of performing the data writing to the memory card by the consecutive commands in a single process, wherein the process is activated when a write-start address A and a sector number s from the one command is decoded, and involves the data writing being started from the write-start address A, and wherein the following command is analyzed until the written sector number reaches s.

For at least similar reasons as discussed above with respect to claim 1, Applicant respectfully submits that Ellis does not disclose, suggest or otherwise render obvious such features. Further, Applicant submits that Carman does not cure these deficiencies of Ellis.

In view of the foregoing, Applicant submits that claim 10 is patentable over the cited

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prior art, an indication of which is kindly requested. Claims 11 and 12 depend from claim 10 and are therefore considered patentable at least by virtue of their dependency.

D. Claim 9 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (U.S. 6,029,226) in view of Harari et al. (U.S. 5,297,148).

Claim 9 depend from claim 1. Applicant submits that Harari fails to cure the deficiencies of Ellis, as discussed above, with respect to claim 1. Accordingly, Applicant submits that claim 9 is patentable at least by virtue of its dependency.

#### IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Takeshi OHTSUKA

By: Kenneth W. Fields  
Kenneth W. Fields  
Registration No. 52,430  
Attorney for Applicant

KWF/ra  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
January 15, 2008